



## **Coil Cleaning Recommendations & Procedures for ElectroFin<sup>®</sup> coated Coils**

A scheduled cleaning of all ElectroFin coated coil areas is needed to ensure the proper operation and service life of the unit. The removal of harmful residues (chlorides) and dirt and debris will greatly increase the life of the coil and extend the life of the unit. The following maintenance and cleaning procedures are recommended as part of the routine maintenance activities to extend the life of an ElectroFin coil coated unit.

**Warning:** Prior to cleaning the unit, turn off and lock out the main power switch to the unit and open all access panels.

### **Remove Surface Loaded Fibers**

If unable to back wash the side of the coil opposite that of the coils entering air side, then surface loaded fibers or dirt should be removed with a vacuum cleaner. If a vacuum cleaner is not available, a ***soft non-metallic*** bristle brush may be used. In either case, the tool should be applied in the direction of the fins. Coil surfaces can be easily damaged (fin edges bent over) if the tool is applied across the fins.

**NOTE:** Use of a water stream, such as a garden hose, against a surface loaded coil will drive the fibers and dirt into the coil. This will make cleaning efforts more difficult. Surface loaded fibers must be completely removed prior to using low velocity clean water rinse.

### **Periodic Clean Water Rinse**

A ***monthly*** clean water rinse is recommended for coils that are applied in coastal or industrial environments to help to remove chlorides. However, it is very important that the water rinse is made with water, (not to exceed 130<sup>0</sup> F) at a low enough pressure to avoid damaging the fin edges. An elevated water temperature not to exceed 130<sup>0</sup> F will reduce surface tension thus increasing the waters ability to remove chlorides and dirt. The water will actually move between the fins instead of spanning over them due to surface tension.

*Quarterly cleaning as described below is recommended as a minimum.*

### **Routine Quarterly Cleaning of ElectroFin Coated Coil Surfaces**

The contributing cause of corrosion on HVAC/R coils is chlorides that adhere to and readily attack the coils. ***Quarterly*** cleaning is essential to extend the life of an ElectroFin coated coil. Coil cleaning should be part of the unit's regularly scheduled maintenance procedures to ensure long life of the ElectroFin coated coil. Failure to clean the ElectroFin coated coil may result in reduced efficiency and e-coat durability in the environment.

The most effective cleaning technique to extend e-coat service life is to first clean the coil with a coil cleaner that will not harm the e-coat surface (see approved products list under Recommended Coil Cleaners section). After cleaning the coils with an approved cleaning agent, use **CHLOR\*RID DTS<sup>TM</sup>** to remove soluble salts and revitalize the unit.



The following cleaning agents have been approved for use on ElectroFin® e-coat coils to remove mold, mildew, dust, soot, greasy residue, lint and other particulate without harming the ElectroFin coated surfaces:

<b>Product</b>	<b>Reseller</b>	<b>Part Number</b>
Enviro-Coil Concentrate	<a href="#">HYDRO-BALANCE CORPORATION</a> TELEPHONE: 800 527-5166 FAX: 972 394-6755 P.O. Box 730 Prosper, Texas 75078	H-EC01
Enviro-Coil Concentrate	<a href="#">Home Depot Supply</a>	H-EC01

\*Follow the manufacturer's directions on the container for proper mixing and cleaning guidelines.

### **Recommended Chloride Remover**

<b>CHLOR*RID International Inc</b>
<b>PO Box 908</b>
<b>Chandler, Arizona 85244</b>
<b>Bus:(800)422-3217</b>
<b>Bus Fax: (480) 821-0364</b>

**CHLOR\*RID DTS™** is quite effective at removing soluble salts, but the directions must be followed closely. This product is not intended for use as a degreaser. Any grease or oil film should first be removed with an approved cleaning agent.

1. **Remove Barrier** - Soluble salts adhere themselves to the substrate. For the effective use of this product, the product must be able to come in contact with the salts. These salts may be beneath any soils, grease or dirt, therefore, these barriers must be removed prior to application of this product. As in all surface preparation, the best work yields the best results.
2. **Apply CHLOR\*RID DTS** - Apply CHLOR\*RID DTS directly onto the substrate. Sufficient product must be applied uniformly across the substrate to thoroughly wet out surface, with no areas missed. This may be accomplished by use of a pump-up sprayer or conventional spray gun. The method does not matter, as long as the entire area to be cleaned is wetted. After the substrate has been thoroughly wetted, the salts will be soluble and is now only necessary to rinse them off.
3. **Rinse** -It is highly recommended that a hose be used, as a pressure washer will damage the fins. The water to be used for the rinse is recommended to be of potable quality, though a lesser quality of water may be used if a small amount of **CHLOR\*RID DTS** is added. Check with CHLOR\*RID International, Inc. for recommendations on lesser quality rinse water.



**Caution:**

**Harsh Chemical and Acid Cleaners**

**AST ElectroFin® coating has an operating range of 3pH to 12pH.**

Harsh chemicals, household bleach or acid cleaners should not be used to clean outdoor or indoor ElectroFin coated coils. These cleaners can be very difficult to rinse out of the coil and can accelerate corrosion and attack the e-coat surface. If there is dirt below the surface of the coil, use the recommended coil cleaners as described above.

**High Velocity Water or Compressed Air**

**CAUTION:** High velocity water from a pressure washer or compressed air should only be used at a very low pressure to prevent fin and/or coil damages. The force of the water or air jet may bend the fin edges and increase airside pressure drop. Reduced unit performance or nuisance unit shutdowns may occur.